Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Amendment of the Commission's Rules	)	ET Docket No. 98-237
With regard to the 3650-3700 MHz	)	
Government Transfer Band	)	
	)	
The 4.9 GHz Band Transferred From	)	WT Docket No. 00-32
Federal Government Use	)	

Comments of Innowave ECI Wireless Systems Ltd.

Innowave ECI Wireless Systems Ltd. ("Innowave") submits these comments in response to the Second Notice of Proposed Rulemaking in the above-captioned proceeding (FCC 00-363, released October 24, 2000). Innowave develops, manufacture and sells fixed wireless access solutions. Our frequency-hopping spread spectrum fixed wireless systems are deployed as wireless local loops throughout the world.

Summary of Position

The 3650-3700 MHz should not be paired with 4940-4990 MHz. Instead, additional spectrum in the 3 GHz range should be used if a paired arrangement is preferred. However, Time Division Duplex (TDD) technology eliminates the need for paired channels, and should be permitted on the 3650-3700 and 4940-4990 MHz frequencies.

Interest of Innowave

Innowave ECI Wireless Systems LTD. , is a subsidiary of ECI Telecom (NASDAQ:ECILF). InnoWave is a world leader in fixed wireless network solutions since 1995.

Innowave's MultiGain Wireless (MGW) system has gained outstanding market recognition throughout the world by offering Spread Spectrum Frequency Hopping CDMA (FH-CDMA) technology and support for advanced standard digital interfaces within one system.

Innowave's fixed wireless solutions have been chosen by more than 50 telecom operators from the Caribbean to Russia and from Europe to the Far East to provide carrier class quality communications throughout remote villages and busy urban centers. Designed from the outset as a Fixed Wireless Local Loop system, the MGW system utilizes radio links instead of copper telephone lines to connect subscribers to the operator local exchange, providing cost-effective, reliable, toll quality telecommunications services worldwide.

MGW's modular architecture and full scalability guarantee easy installation and operation, a low initial setup investment and an attractive life cycle economy. Advanced network management and planning tools enhance the system's functionality. MGW utilizes the proven Spread Spectrum Frequency Hopping - CDMA (FH-CDMA) radio technology and

supports the most advanced standard digital interfaces to ensure superior communications service performance - from high quality POTS and high-speed data to ISDN.

Unmatched propagation performance in cluttered environments and excellent coverage in open areas make MGW well suited for urban, suburban and rural WLL applications.

MGW excels in functionality and performance:

- Uncompromising POTS services
- High-speed modem connectivity (56kbps)
- High-rate data (ISDN)
- Low initial set-up investment
- Built-in modularity and scalability
- 1, 2, and 4 line subscriber units available
- Extensive radio coverage ranges
- Widest range of frequency band support (800MHz through 3.8GHz)
- Support for standard analog and digital interfaces (CAS, , V5.2, TR 008)
- Integrated management and planning tools

Frequency bands available today:

- 800MHz
- 1.5GHz
- 1.9GHz
- 2.4GHz -ISM Bands (FCC: Part 15)
- 2.4GHz -ISM Bands (ETSI: ETS 300-328)
- 3.5-3.8GHz

MGW offers the following benefits:

- Low initial set-up investment
- Fast response to growing demand
- Linear growth of investment
- Fast and simple installation
- Concentrated interfaces to local exchange
- Coexistence with other radio providers
- Wide range and remote area coverage 25km Line of Sight (LOS)
- Remote feed of Radio Port Units (RPU)
- Flexible sectorial antennas coverage

MGW Enhancement

The eMGW system is an enhancement of the MGW that offers dynamic state-of-the-art hybrid technology that supports both IP packet switching for high speed Internet and data services (up to 512Kbps), and circuit switching for toll quality voice, high-speed voice band data (V.90) and ISDN-BRI. The eMGW has been designed and developed around the robust and advanced architecture of the MGW to enable smooth migration or full co-existence with current MGW solutions. The eMGW is a point-to-multipoint FWA system delivering optimal solutions for the growing voice and data demands of both high-end residential and SOHO users.

Widening the spectrum

The WaveGain™ in development is a state of the art Broadband Wireless Access system, operating in the 3.4 – 3.8 GHz. Based on advanced Orthogonal Direct Sequence CDMA technology, the WaveGain is an innovative Point-to-MultiPoint FWA system that supports data and voice services up to 2Mbps. Using both circuit and packet switching, the WaveGain enables seamless convergence of voice and data, making it the optimal broadband solution for high-end residential, SOHO and small business customers.

3650-3700 MHz Should Not Be Paired with 4940-4990 MHz

Innowave congratulates the Commission on the reallocation of 3650-3700 MHz for terrestrial wireless services. This band can be used to provide high quality competitive voice and high data rate services on a nationwide basis.

However, the proposal to pair 3650-3700 MHz with 4940-4990 MHz presents a number of technical problems, and should not be adopted. First, two separate antennas would be needed on each transceiver, since the bands are too far apart in frequency for one antenna to cover effectively. Second, because of the frequency difference, uplink and downlink propagation will differ, because different scattering and interference mechanisms will be present in each band; this will complicate the planning and deployment of systems. Third, radios will be more complicated and costly, and potentially less reliable, because of the need to include more filtering and oscillator circuits to cover the two separate bands.

Finally, the 4940-4990 MHz band is not used anywhere in the world for commercial applications. This has several implications. First, components are more expensive and limited in availability. Second, there is no hope of harmonizing such a paired allocation with other countries, so U.S. users could never reap the cost and efficiency benefits of common worldwide equipment designs.

A far better approach would be to pair the 3650-3700 MHz band with another subband from within the 3400-3700 MHz range. This would make the allocation more compatible

with worldwide allocations. The FCC should consult with the NTIA to determine whether it would be possible to trade the 4940-4990 MHz band back to the Federal Government in exchange for 50 MHz from within the 3400-3700 MHz range.

Time Division Duplex Technology Should Be Permitted

It is essential that the Commission allow the use of Time Division Duplex (TDD) technology within the 3650-3700 MHz band. As the Commission has recognized in the 700 MHz band and in the 24 GHz band, TDD technology offers certain benefits, even when spectrum blocks are paired for traditional Frequency Division Duplex (FDD) operation. Since with TDD, both directions operate on exactly the same frequency, it is possible to employ channel coding and signal processing techniques that are difficult or impossible to employ using FDD. Moreover, with TDD it is possible to assign upstream and downstream time slots asymmetrically, in order to optimize spectral usage when traffic loads are asymmetric.

In the 3650-3700 MHz band, where there is no suitable FDD pairing, TDD would be the best technical solution. Even if the Commission does decide to assign pairs of channels, either using the 4940-4990 MHz band or another part of the 3400-3700 MHz band, TDD should be permitted within each of the paired channel blocks. InnoWave recommends that bidders/applicants be allowed to specify their own unpaired or paired block preferences as part of the licensing procedures, in as flexible a manner as possible.

Conclusion

In light of these considerations, Innowave recommends that the Commission should not pair the 3650-3700 MHz band with 4940-4990 MHz. In any case, the Commission should allow the use of Time Division Duplex technology in these bands.

/s/

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December 18, 2000